

ABSTRACT OF DISCLOSURE

A heat-generating device is characterized to determine the relationship between the speed of a DC cooling fan, and the thermal margin of the heat-generating device.

Since the speed of DC fans is substantially linear with respect to their input voltage, the

5 speed of the fan may be adjusted within a system to provide the speed necessary for

cooling needs. An altitude is input to a converter which uses the characterization of the

heat-generating device to determine a fan speed necessary at that altitude to cool the heat-

generating device to a temperature within its operating range. The converter then controls

the voltage supplied to the DC fan to result in the needed fan speed.